



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0092; Project Identifier MCAI-2020-01501-R;

Amendment 39-21528; AD 2021-09-14]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters (Type Certificate Previously Held by Eurocopter France) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2010-16-51, which applied to certain Eurocopter France (now Airbus Helicopters (Airbus)) Model SA330J helicopters. AD 2010-16-51 required inspecting for a gap between the main gearbox (MGB) oil cooling fan assembly (fan) rotor blade and the upper section of the guide vane bearing housing and depending on the results, replacing the two fan rotor shaft bearings with two airworthy bearings. This AD retains the requirements of AD 2010-16-51 and also requires installing improved MGB fan rotor shaft bearings and repetitively inspecting the new improved MGB fan rotor shaft bearings, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. AD 2010-16-51 was prompted by the separation of a fan rotor blade that caused puncture holes in the transmission deck. This new AD was prompted by the development of an improved MGB fan rotor shaft bearing design. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For material incorporated by reference (IBR) in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this material on the EASA website at <https://ad.easa.europa.eu>. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110. It is also available in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0092.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0092; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Mahmood Shah, Aerospace Engineer, Certification Section, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5538; email Mahmood.g.shah@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2020-0171, dated July 28, 2020 (EASA AD 2020-0171), to

correct an unsafe condition for all Airbus Helicopters, Eurocopter, Eurocopter France, Aérospatiale, Sud Aviation Model SA 330 J helicopters.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2010-16-51, Amendment 39-16410 (75 FR 53857, September 2, 2010) (AD 2010-16-51). AD 2010-16-51 applied to Eurocopter France (now Airbus) Model SA330J helicopters. The NPRM published in the *Federal Register* on February 26, 2021 (86 FR 11657). The NPRM was prompted by the newly developed MGB fan rotor shaft bearing design. The NPRM proposed to continue to require the inspections required by AD 2010-16-51, as specified in EASA AD 2020-0171. The NPRM also proposed to require installing improved MGB fan rotor shaft bearings and repetitively inspecting the new improved MGB fan rotor shaft bearings, as specified in EASA AD 2020-0171.

The FAA is issuing this AD to prevent rotor burst of the MGB fan, damage to the hydraulic lines and flight controls, and subsequent loss of control of the helicopter. See EASA AD 2020-0171 for additional background information.

Discussion of Final Airworthiness Directive

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed.

Related Service Information Under 1 CFR Part 51

For MGB fan rotor shaft bearings (both rear and front) part number (P/N) 704A33651114 (manufacturer P/N (MP/N) 205FFTX74K6-G33) and MGB fan rotor shaft bearings (both rear and front) P/N 704A33651268 (MP/N 594918), EASA AD 2020-0171 describes procedures for inspecting for play (a gap) between the MGB fan rotor blade and the upper section of the guide vane bearing housing. If there is play that does not meet the minimum requirement, EASA AD 2020-0171 requires replacing the affected MGB fan rotor shaft bearings with MGB fan rotor shaft bearings (both rear and front) P/N 704A33651268 (MP/N 594918).

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Differences Between this AD and EASA AD 2020-0171

EASA AD 2020-0171 applies to all Model SA 330 J helicopters, whereas this AD applies to certain Model SA330J helicopters instead. EASA AD 2020-0171 refers to flight hours, whereas this AD uses hours time-in-service. EASA AD 2020-0171 requires inspecting for play, whereas this AD requires inspecting for a gap instead. EASA AD 2020-0171 requires returning certain parts, whereas this AD requires removing the parts from service instead. EASA AD 2020-0171 requires completing a response form, whereas this AD does not.

Interim Action

The FAA considers this AD interim action. If final action is later identified, the FAA might consider further rulemaking then.

Costs of Compliance

The FAA estimates that this AD affects 15 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates that operators may incur the following costs in order to comply with this AD.

Inspecting for a gap between the MGB fan rotor blade and the upper section of the guide vane bearing housing takes about 2 work-hours for an estimated cost of \$170 per helicopter and \$2,550 for the U.S. fleet, per inspection cycle.

Replacing a set of two bearings takes about 6 work-hours and parts cost up to about \$1,665 for an estimated cost of up to \$2,175 per helicopter.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by:

- a. Removing Airworthiness Directive (AD) 2010-16-51, Amendment 39-16410 (75 FR 53857, September 2, 2010); and

- b. Adding the following new AD:

2021-09-14 Airbus Helicopters (Type Certificate Previously Held by Eurocopter France): Amendment 39-21528; Docket No. FAA-2021-0092; Project Identifier MCAI-2020-01501-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected Airworthiness Directives (ADs)

This AD removes AD 2010-16-51, Amendment 39-16410 (75 FR 53857, September 2, 2010).

(c) Applicability

This AD applies to Airbus Helicopters (type certificate previously held by Eurocopter France) Model SA330J helicopters, certificated in any category, with main gearbox (MGB) oil cooling fan (fan) rotor shaft bearings (both rear and front) part number (P/N) 704A33651114 (manufacturer P/N (MP/N) 205FFTX74K6-G33) or P/N 704A33651268 (MP/N 594918), installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 6322; Main Gearbox Oil Cooler.

(e) Reason

This AD was prompted by the development of an improved MGB fan rotor shaft bearing design. The FAA is issuing this AD to prevent rotor burst of the MGB fan, damage to the hydraulic lines and flight controls, and subsequent loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2020-0171, dated July 28, 2020 (EASA AD 2020-0171).

(h) Exceptions to EASA AD 2020-0171

(1) Where EASA AD 2020-0171 refers to its effective date, this AD requires using the effective date of this AD.

(2) The “Remarks” section of EASA AD 2020-0171 does not apply to this AD.

(3) Where EASA AD 2020-0171 refers to flight hours (FH), this AD requires using hours time-in-service.

(4) Where EASA AD 2020-0171 requires measuring for play, this AD requires measuring the gap between each MGB fan rotor blade and the upper section of the guide vane bearing housing.

(5) Where “The ASB” service information referenced in EASA AD 2020-0171 specifies to return certain parts to Airbus Helicopters, this AD requires removing those parts from service instead.

(6) While “The ASB” service information referenced in EASA AD 2020-0171 specifies completing the response form in Appendix 4, this AD does not contain that requirement.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2020-0171 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Special Flight Permit

Special flight permits, as described in 14 CFR 21.197 and 21.199, are not allowed.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (l) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(l) Related Information

For more information about this AD, contact Mahmood Shah, Aerospace Engineer, Certification Section, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5538; email Mahmood.g.shah@faa.gov

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2020-0171, dated July 28, 2020.

(ii) [Reserved]

(3) For EASA AD 2020-0171, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110. This material may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0092.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to:

<https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on April 22, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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